Summary Report for Grades 6-8

Big Ideas Learning Big Ideas Math, Grades 6-8

Degree of Evidence regarding the Standards for Mathematical Practice:

Moderate Evidence

Summary of evidence:

- 1. **Make sense of problems and persevere in solving them**. There is moderate evidence of this practice throughout the sampled materials. Although some problem scenarios could have been more open-ended, reviewers noted frequent opportunities for sense making in problem-solving situations and an expectation that students discuss their thinking with others. There is also teacher support for facilitating sense making and student discourse.
- 2. **Reason abstractly and quantitatively**. There is moderate evidence of this practice throughout the sampled materials. Reviewers noted numerous opportunities for sense making, contextualizing, and decontextualizing.
- 3. **Construct viable arguments and critique the reasoning of others**. This practice was cited as a particular strength throughout the sampled materials. Sections within the resource such "In your own words," "Taking the math deeper," and "Error Analysis" provide abundant opportunities for applying prior knowledge, justifying answers, and student discourse.
- 4. **Model with mathematics**. This practice is not as well developed as some of the others. The reviewers noted use of models, but these lessons were typically prescriptive. In Grades 7 and 8, the resource does not use models at all in the sampled geometry sections; rather, only the formulas are provided.
- 5. **Use appropriate tools strategically.** There is limited to moderate evidence of this practice. Technology or other tools are used in most of the sampled sections. However, graphing calculators are not used in the sampled sections about functions.
- 6. **Attend to precision.** There is moderate evidence of this practice, and it was cited as a particular strength in the Grade 8 resources. Student discourse is frequently encouraged and use of precise notation and communication is modeled. There is also support for the teacher to promote this practice among students.
- 7. **Look for and make use of structure**. There is moderate evidence of this practice, and it was cited as a particular strength in Grades 6 and 7. The resource consistently reinforces prior learning and encourages students to look for patterns. "Think about this" sections require students to reflect on the underlying structure of the concepts being studied.
- 8. Look for and express regularity in repeated reasoning. There is limited to moderate evidence of this practice in the series. Reviewers noted that students were frequently required to make generalizations and evaluate the reasonableness of their results. In Grade 8, the reviewers noted missed opportunities, since models are not used (see above) to develop solid understanding of measurement formulas.